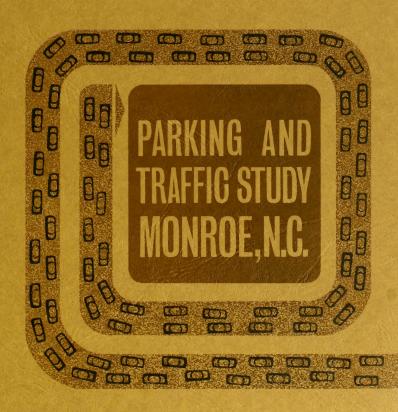
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The preparation at this report was financially dided through a Federal grant from the Department of Housing and Urban Development under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.



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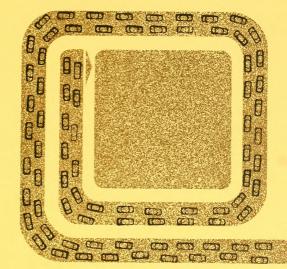
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INTRODUCTION







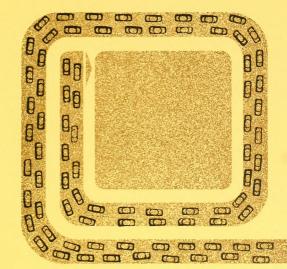


I. INTRODUCTION

The City of Monroe was first settled in the early 19th Century. At that time the streets were laid off in a series of square and rectangular blocks forming a grid system which did not necessarily relate to the topography of the area or to the use of the land. Since then, many changes have taken place further complicating the original grid system of streets for today's use. One of the changes that has greatly affected downtown Monroe is the advent of the modern day automo-The automobile has helped mankind in many ways but has hindered in others. Two basic requirements of the automobile must be considered in any program to help revitalize downtown Monroe. Autos need streets on which to move and spaces in which to be stored or park-In Monroe and in most cities, both of these fundamental requirements are being only partially by fitting the function of each into the existing grid street pattern. In trying to serve both functions the downtown street system serves neither with any efficiency. To meet the needs of today, the downtown area needs a street system which is designed to move vehicles without the interference of pedestrians, conflicting through city traffic, or adverse turning movements. In addition to this, automobile storage should be provided in off-street lots conveniently located with respect to the main shopping stores, and the major traffic streets. This report is a study of the parking and traffic circulation system presently being used within the Monroe central business district. It is being prepared concurrently with a preliminary design plan for the district. The major emphasis in this report will be centered on existing traffic and parking conditions, their deficiencies and possible solutions. The central business district preliminary design plan, using information from this study, locates future parking facilities and indicates future major thoroughfares that are consistent with the overall central business district objectives.



EXISTING CONDITIONS









II. EXISTING CONDITIONS

Several field surveys were conducted to gather data for analysis. The first was an inventory and recorded the following factors: location and number of on-street and off-street parking spaces, building usage, and land usage. The second survey was conducted in two parts with the objectives of obtaining data on the parking characteristics and the effectiveness of the present parking program. This parking characteristics survey was conducted in the Spring of 1965 (on a Friday) under pleasant weather conditions, and it is assumed that an average or slightly above average sample was gained of the existing situation. The survey was conducted in Monroe by off duty policemen going around a specific route which had been prepared for them every one-half hour. During the survey day license numbers of all vehicles parked in the spaces were recorded and the data was tabulated by the Division of Community Planning.

Parking characteristics point out those areas where motorists park, how long they remain at the space, and those areas where the motorists would like to park. The information collected from the survey was divided into three basic sections: the percent of time spaces were used, duration or time spent at the meters, and turnover or the number of cars using a space.

The spaces with the highest percent usage generally indicate those areas where the demand is highest. The average duration figures indicate the average length of time parkers spent at facilities. Those spaces with the lowest length of stay should be generally in those areas where the demand for a space is low. The average duration data is useful in determining the best time limits to place on the meters in any particular area. The average turnover is closely related to duration and indicates the average number of cars that use a space during a day. The higher the turnover figure, the greater number of vehicles that are using a space during a day.

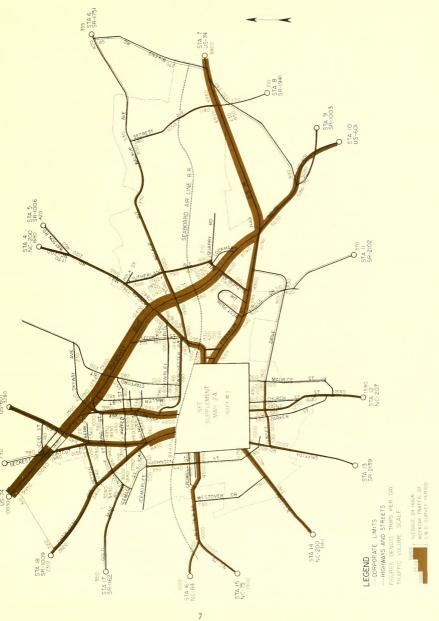
Another important aspect of the usage survey is the determination of the location and number of illegal parkers or "meter feeders." The meter feeder is usually, but not always, the employee who occupies one parking space all morning, afternoon, or even all day by continually depositing coins in the meter. In some cases the meter feeder knows the routine of the officer checking the meters so well that he only feeds the meter when the officer is approaching his meter. These meter feeders deprive prospective customers of good convenient places to park. Curiously enough, it has been found in other studies that many merchants condone this sort of practice and many even participate themselves.

The two main considerations which need to be investigated in regard to traffic in Monroe's Central Business District are accessibility and circulation. People from all areas of the City and County should be able to drive to the central business district in safety without undue traffic congestion. On arriving they should be able to drive to their destination within the central business district in a reasonable length of time without a great deal of interference from other traffic not having any business in the central business district. At their destination, they should be able to find ample parking relatively close by.

In 1964, the North Carolina Highway Commission prepared an Origin and Destination Traffic Survey for Monroe. This study used an arbitrary line approximately a mile outside the city limits and tabulated vehicular trips which cross the boundary as externalinternal and those just within the boundary as internal-internal. Within the survey area this study found that 5,479 trips or 27 percent of external-internal trips on the study day terminated in the central business district. This was the largest number of trips going to a particular study area, and more than four (4) times the number of trips to the next highest study area. Approximately the same proportions were evident for the internal-internal trips tabulated. These figures indicate the dominant position which the central business district plays in generating traffic demand not only within, but outside the city limits.

The central business district is in the approximate center of Monroe's urban development so that a person can reach it by using one of many routes which come in from every direction. Charlotte, Skyway, and West Franklin streets carry the highest average traffic volumes. These streets provide good access from Roosevelt Boulevard and the northern and western parts of the City. Hayne, Lancaster and East Franklin streets are much narrower streets and carry smaller volumes of traffic into the central business district, but also serve as access streets.

Roosevelt Boulevard, which was completed in 1953, provided a bypass for U. S. 74 and 601 traffic which before that time had to come through the City. In 1964, this bypass was serving as many as 12,000 vehicles per day thereby increasing the ability of people to gain access to the central business district by reducing

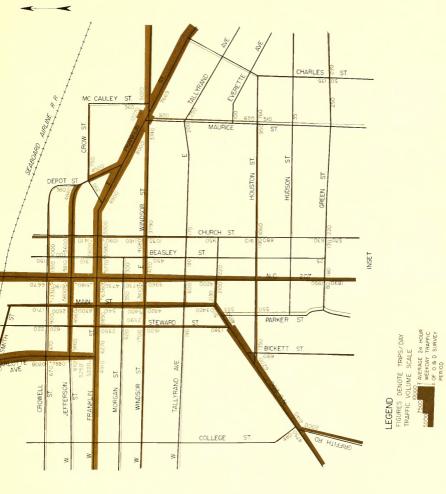


congestion and delays on other city streets. Since the bypass has been built, a number of non-CBD oriented businesses have located there such as auto sales, motels, restaurants, amusements, small industry and other similar uses. This type of development will continue and will generally affect the manner in which Monroe will develop in the future.

Development along the bypass will attract residential development in those land areas just to the north or south of the bypass. In addition, future residential development will seek areas where it can find municipal utilities. Since the major sewer outfall lines will be to the south and west, in all probability this will be the area where most of the new residential development will take place. All of these areas have good access to the central business district, but it means that the central business district will have to develop in such a manner as to keep a competitive shopping center from being constructed along the bypass.

Besides being able to get to the central business district, it is necessary that drivers be able to circulate downtown in a systematic manner without undue interference. The heaviest traveled streets within the central business district are Charlotte, Hayne and Franklin streets with 8,020, 6,670 and 5,770 vehicles per day respectively in 1964. These streets are wide enough for the traffic they are presently carrying. Most of the central business district streets have two lanes of parking which need approximately ten (10) feet each for ease of operation and two lanes for moving traffic which require twelve (12) feet each. Highway standards consider this type of street to be adequate to carry approximately 6,000 vehicles per day when not located in downtown areas. In the central business district, turning movements, curb parking and the congestion which entering and exiting create, traffic lights, pedestrian crossings and slow speeds can reduce these capacities as much as 50 percent.





II-B ON STREET PARKING CHARAC-

The field survey of on-street parking spaces conducted in March of 1965 disclosed a total of 482 parking spaces at the curb in the central business district. A total of 349 metered spaces were recorded, the remainder being unmetered spaces. The total of unmetered spaces includes those spaces along curbless streets such as Hawk Street, besides those spaces that are marked. Included in the total of the metered spaces are 56 twelveminute meters. Most of these twelve-minute meters are located at the corners in the principal retail section of the central business district, but in some cases are placed in front of businesses or services that only require short stopping periods.

Usage

The percent usage information is perhaps the most important data collected in the field surveys. It is the primary indicator of the major areas of demand and indicates those areas where additional parking spaces are needed. It also indicates which facilities are not used enough to support their existence.

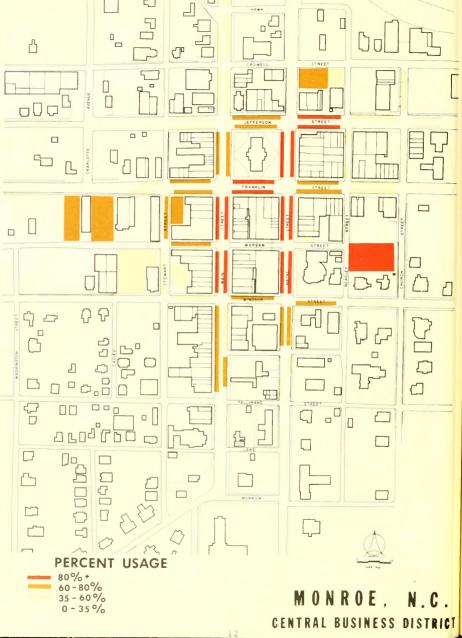
The results of the survey show that Main, Franklin, and Hayne are the most heavily used streets for parking. An extraordinarily high 98 percent usage was recorded in the spaces in the Belks block of Main Street. In all, there were four street sides that recorded usages over 90 percent and eleven recordings of over 80 percent for the side of a street. 1/ The extremely high usages become more significant when it is considered that a percent usage of 85 percent includes the time it takes for a vehicle to vacate a space, and for another vehicle to locate the space and park. 2/

There are two possible ways in which the expected maximum usage could be exceeded. One is for the spaces to be taken up by people violating the time limits on the meters and remaining in the space all day, i.e., "meter feeders." When meter feeders take up a space all day there is no loss of usage from the entering and exiting of cars during the day. The other way the maximum could be exceeded is by having an extremely high demand for the spaces and a high efficiency of entering and exiting from the spaces. The high demand would come from a considerable number of motorists driving around the block until a space was vacated or a steady high volume of traffic on the street already existing.

2/ Eno foundation for Highway Traffic Control, Parking

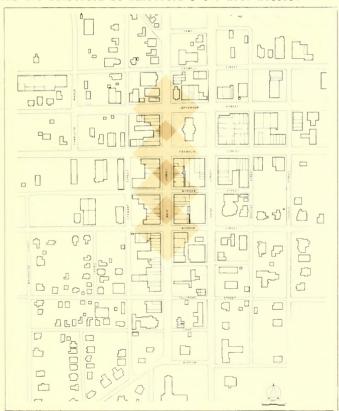
 $[\]overline{1/A}$ side of a street is the designation for the total number of meters along any one side of a street in any particular block.





In Monroe the high usages previously mentioned are the result of efficient turnover and high demand. In the Main Street block that had 98 percent usage, there was not a single recording of a meter feeder. However, high usage of spaces on Hayne Street located in front of the court house was probably due to meter feeders.

In general, almost all the meters realized good usage on the survey day. There were only a few streets with under 35 percent usage, and only a few more that were below 50 percent. The average for the entire $7\frac{1}{2}$ hour survey day was 63.2 percent usage. This compares favorably with 58 percent for Rockingham, and 57 percent for Lumberton at Lumberton's two-hour meters.



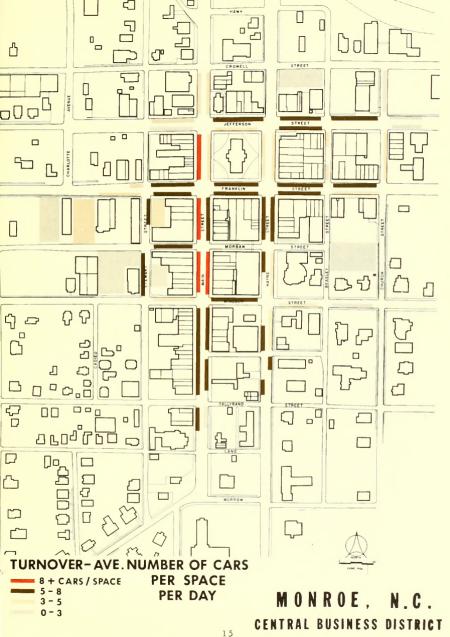
Turnover

The parking turnover data indicates the average number of vehicles that parked in a metered space during the survey period of $7\frac{1}{2}$ hours. There were 1454 vehicles parked at 290 two-hour meters for an average turnover of five cars per space per day. This figure is slightly better than the figure of 4.7 cars per space for the City of Lumberton. Rockingham and Lumberton had very high usages in the major retail areas and very low usages in the fringe areas, while Monroe had more of an even usage throughout the central business district.

An area in the heart of the central business district has been indicated on the accompanying map. It is diamond shaped and outlines areas within three hundred (300) feet of those intersections where there is the highest demand for parking. There are 169 two-hour meters located within these areas, 58 percent of the total two-hour meters, and 977 vehicles or 67 percent of the total vehicles recorded in the central business district parked at those 169 meters. The turnover in the special area was 5.8 vehicles per space, which is only slightly better than for the central business district on the whole. This is not really as great a difference as would be expected. There were not enough street frontages such as the one in front of Belks where the turnover was 8.7 vehicles per space to affect the overall average.

On the whole, however, the turnover is good. The overall average indicates that the parkers are not remaining at the meters as long as they could. For example, if there had been 100 percent usage and each vehicle had parked in the two-hour spaces for the total two hours, the best turnover rate that could have been reached would have been four vehicles per space per day. Since the overall percent usage was only 63.2 percent one can conclude that vehicles were remaining for a much shorter time than they could have.

The streets with the highest turnover are those nearest the major stores on Main, Hayne and Franklin streets. In these areas turnover averages about seven vehicles per space. These spaces that are most convenient are not being taken up by meter feeders, or by long-term parkers. The one notable exception to this good usage occurred on Hayne Street in front of the county courthouse where there was a very high percent usage of 89 percent and a low turnover of only 4.2 vehicles per space per day due primarily to the fact that eleven meter feeders were recorded in this block. There were also eleven meter feeders recorded along a three block section of Jefferson Street. The remainder of the meter feeders were fairly well spread out over the central business district.



CENTRAL BUSINESS

Duration

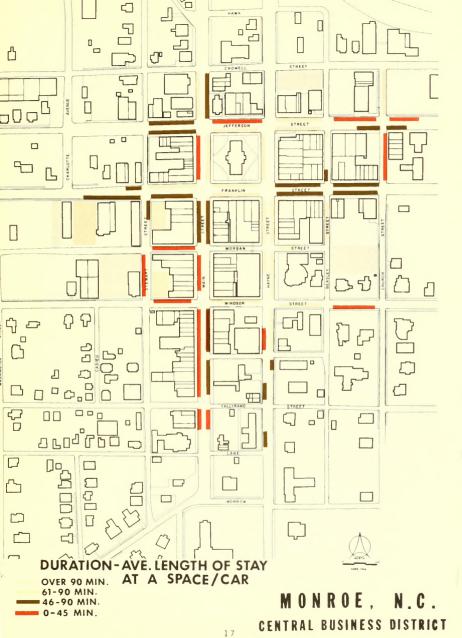
The parking duration data indicates the average length of stay at a space. If a motorist remained at a meter for the total two hours on the meter, his duration time would be two hours. A shorter duration period is desirable so more vehicles will be able to use a space. The duration data is closely related to the turnover data in that the greater number of cars using a facility would generally result in a shorter duration period.

In Monroe on the survey day the parkers averaged a stay of fifty-seven minutes at the two-hour meters. The duration figure for Monroe is similar to Lumberton's fifty-eight minutes, but it is far higher than Rocking-ham's forty-four minutes. Even though the Monroe figure is not quite as low as would be expected, it nevertheless is lower than the two hours each motorist could have spent at the meter. The figure indicates that the meter feeders are affecting the overall duration slightly. In one block of Hayne Street there were so many meter feeders that the average duration per vehicle was two hours and seven minutes. This means that the average is greater than legally permitted.

The nature of the survey made it impossible to determine with any accuracy the duration of the parkers at the twelve minute meters. This is so because the survey was scheduled for a circuit to be made every one-half hour. In order to determine with greater accuracy the true usage and duration times at the twelve minute meters a survey circuit time of less than twelve minutes would have to be used. However, even with the survey worker checking twelve minute meters only at half-hour intervals, a large number of violators were recorded. A total of thirty-one violators were found parking an hour or longer at the twelve minute meters. Seven violators parked for over two hours and one violator was recorded parking as long as eight hours.

Because of the flagrant violations of the twelve minute meters it would seem advisable for the City to either enforce the short time period or change the meters to a longer time period.

The City should consider relating the meter time to the average time an auto stays at a space. This in effect would consist of changing the two hour meters to one hour meters.



II-C OFF-STREET PARKING CHARAC-TERISTICS

The field survey of off-street parking facilities conducted at the same time as the on-street survey in March of 1965 disclosed a total of 1589 spaces. These spaces were classified under one of three types: Public, for customer use at a specific store, and for private use only.

Public off-street lots provide spaces for 316 vehicles in the central business district. There are several other lots that are used as public lots even though they are supposed to be for customer use at a specific store, and are classified as such in this study. In Monroe the public lots are run both by private concerns and by the City. The principal city lot is the pay lot between Church and Beasley. This lot is paved, marked off and contains space for 75 vehicles. It is controlled by gates, and a parker can remain in the lot all day for ten cents. The second principal lot is the Bowie-Stevens lot between Franklin and Morgan streets. This lot is free and paved. There is no time limit at this lot or any of the other public lots and they are used principally by employees in the central business district.

Another public lot is being cleared between Morgan and Windsor streets, across the street from the existing Bowie-Stevens lot.

A plan has been prepared for this lot which will provide spaces for approximately 130 cars when completed. Like the Bowie-Stevens lots across the street, it will be over 700 feet from the main retail stores on Main Street, and will probably be used by employees. If the new lot provides any spaces for the shopper wishing to park close to the stores, it will be indirectly by providing spaces where employees can park and thereby alleviating a few spaces from employees that feed the meters.

In the core area of Monroe's central business district there are 787 off-street parking spaces classified as customer use for a specific store. In addition to these core spaces, there are 499 customer use spaces adjacent to the core - yet still considered within the central business district area. This results in a total of 787 parking spaces classified as customer use for a specific store. A specific use lot is the type of offstreet facility such as might be found at a doctor's office or food market. Parking is permitted at a specific use lot only while you are seeking the goods or services of the establishments which provided the lot.

Parking lots provided by private specific business establishments such as the ones provided by Belks and Farmers Hardware are the only two off-street lots that the public can use that are within a convenient walking distance of the major retail stores. The Star Market provides public parking spaces even though it supposedly is a customer use only facility, and the spaces at this facility are only 400 feet or so away from the principal retail stores on Main Street. In contrast the two principal public parking facilities are only 700 feet away. On the eastern edge of the central business district, Winn-Dixie, Thrifty Market and other stores provide over 400 off-street parking spaces. It is probable that these lots are used by some shoppers and employees in the central business district even though the lots are on the fringe of the central business district.

There are 486 spaces provided in private parking lots scattered in different locations throughout the central business district. A private facility is referred to as a lot where spaces are rented to individuals and employees or a lot for company cars or trucks only. The number of private spaces in Monroe compares favorably with two other North Carolina cities recently studied, one of which was smaller and one larger than Monroe. Rockingham had 468 private spaces and Lumberton had 464 private spaces. In Lumberton the private spaces at the time of the survey made up 71 percent of the total off-street spaces. In Rockingham the private spaces made up 50 percent of the total off-street spaces. In comparison Monroe's private spaces make up only 31 percent of the total off-street spaces -this is a very desirable condition because customers have need for more places to park than people who work downtown. Employees will usually walk much further than customers, but in some cities he does not have to as the employee lots are more conveniently located than customer lots. This was the primary problem in cities such as Rockingham and Lumberton, but it is not the case in Monroe. In Monroe the private off-street parking lots are not conveniently located to the major retail shopping area.

The total number of off-street spaces is higher than the average of 600 spaces for cities of Monroe's size, but less than a hundred are actually convenient and this is the more important aspect. 1/Monroe will not actually be helping the merchants and the shoppers if it continues to increase the number of spaces on the fringe of the central business district where they are too far from stores they should serve.

Parking Guide for Cities, U. S.Bureau of Roads, U. S. Department of Commerce, page 18.

Off-Street Parking Characteristics

Detailed surveys to determine parking characteristics were made of the cars parking in many of the off-street lots just as they were made for the on-street spaces. Primarily, the lots for public use and the lots for customers of a specific store were all surveyed. In addition, two private lots were also surveyed.

Usage

In general, all of the off-street lots surveyed had a high usage. The pay lot between Church and Beasley streets had the highest usage with the spaces being occupied 81.7 percent of the survey day. The lowest percent usage recorded at an off-street lot was 37.8 percent at a customer-use only lot behind the People Savings and Loan Building. Most of the lots had between 60 percent and 75 percent usage, including the large Bowie-Stevens lots which had a 67.6 percent usage for the survey day.

The fact that all these lots, which are a long walking distance (generally 700 feet or more) from the main stores had a good percent usage does not tell the whole story as can be seen from the following sections on turnover and duration. The percent usage data merely indicates that spaces were being used. The following turnover and duration data help disclose who the primary user of the spaces has been.

Turnover

In general the turnover figures for the off-street lots are low, but their figures are about average for off-street lots for cities of similar size. The figures are also no more than could be expected considering the great distance most of the lots are from the stores.

The public lot between Church and Beasley streets, which had the highest percent usage, had a turnover of only 1.2 vehicles per space. These two factors, that of high usage and low turnover, indicate that the lot is used primarily by employees or other all day parkers. The lot with the highest turnover was also the lot most convenient to the major retail stores. The Belk's lot had a turnover rate of 3.9 vehicles per space. Another conveniently located off-street lot owned by the Farmers Hardware, had a 2.9 vehicles per space turnover. The Bowie-Stevens lot had a turnover of 1.3 vehicles per space, which indicates that it, like the public pay lot, is being used primarily by employees and other all day parkers.

In general, the turnover figures for both the on and off-street spaces are closely related to the parking demand created by the stores, and the accessibility and efficiency of the parking facility.

Duration

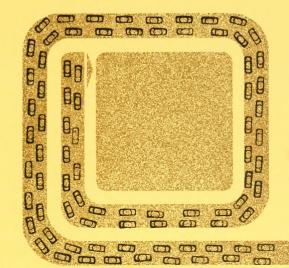
Parking durations at off-street lots were much longer than on-street durations. The shortest duration time recorded at the surveyed off-street lots was the sixty-three minute average at the A & P - Goodyear lot. The Belk's lot had the next lowest duration with a duration of sixty-five minutes. The public lot between Church and Beasley had an average duration of four hours, and the Bowie-Stevens public lot had a similar high duration average of over three hours per vehicle. All of this just proves further that the majority of off-street spaces are being used by employees rather than shoppers.







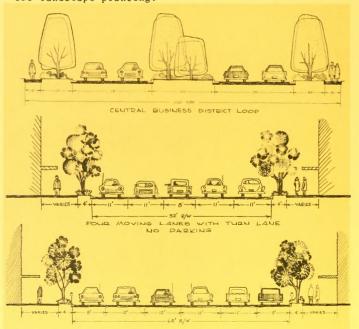
CIRCULATION & PARKING STANDARDS



III. CIRCULATION AND PARKING

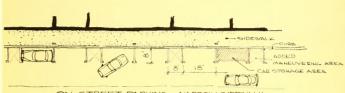
A. Streets - Minimum Right-of-way and Paving Widths
Several of the streets in the central business
district of Monroe are too small to allow adequate
traffic flow. If they are to be widened or any new
streets developed in the future, all should meet
minimum standards that would alleviate any inadequacy.

The streets that are to be used as part of the interloop around the central business district should meet the following highway standards: the width should allow for four moving lanes of twelve feet each and parking should be eliminated at the curb. The total pavement width including the moving and turning lanes should be fifty-two feet. The right-of-way should allow for sidewalks on either side as well as space in which utilities may be constructed. The median should be at least twenty feet wide to provide space for landscape planting.

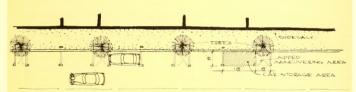


FOUR MOVING LANES WITH PARKING

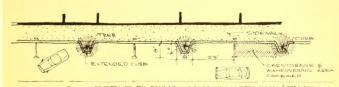
B. Parking Standards - Any future development concerning on-street parking spaces should consider the following standards for on-street parking.



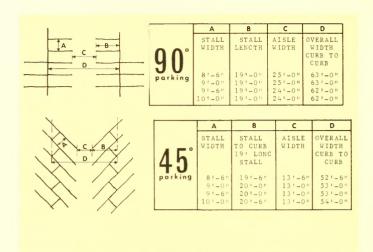
ON STREET PARKING - NARROW SIDEWALK



ON STREET PARKING - WIDE SIDEWALK (12'MINIMUM)



ON STREET PARKING - NARROW SIDE WALK / TREES

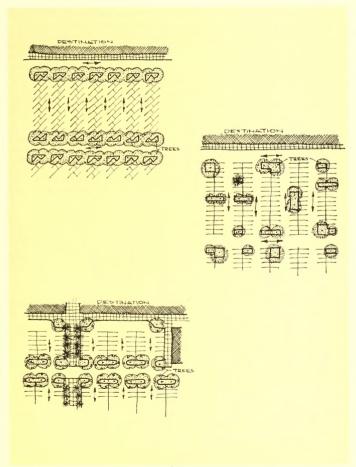


In the development of future off-street parking facilities several considerations should be kept in mind. First, the lot must be accessible and clearly convenient to the major shopping area. Second, it should not be overly expensive to the customer. Third, the lots should be well laid out and attractively presented to the user.

Development of the lots should be carried out with three different type parkers kept in mind. The first type parker is the short-term shopper whose destination is one of the retail shops or professional offices in the core area of downtown. This type parker should be provided with the most convenient lot in regard to easy accessibility and nearness to the destination.

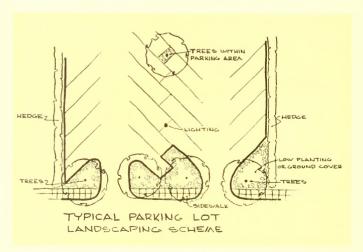
The second type of parker to be provided for is the long term shopper. In Monroe this type of parker usually comes to shop from an area that is outside the urban limits. Since a shopper from the greater trading area makes fewer trips, he needs more time in which to complete his business. Lots for this type parker must still be accessible, but they can be further from the main core of stores, still remaining on the fringe of the core area. The lots must still be constructed with the requirements of attractiveness kept in mind, and they must be constructed in an area where the parker will not be afraid to leave his automobile.

The third type of parker to be accommodated is the employee. The employee is another type of long term parker, but different still from the long term shopper. The employee needs a space for an all day period rather than for three or four hours as in the case of the long term shopper. The employees lot should also be on the fringe of the core area and should be attractive and safe.



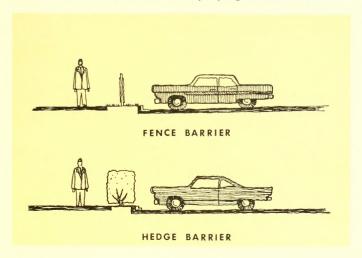
C. Visual Appearance - The typical parking lot in downtown Monroe regardless of its location detracts from the visual environment of the area. Parking lots in all areas of the City can and should be more than just bare utilities. Concrete or asphalt parking lots no matter how efficiently they work, how well they are paved, or how neatly the spaces are marked, are generally the least attractive visual elements in the central business district of any town. In addition to proper grading, paving, curb and gutter, signs, and lighting, other landscaping improvements should be considered to supplement this basic barrenness. properly landscaped lot will augment prestige and appearance and will contribute greenery to areas devoid of natural beauty. Landscaping helps screen lots from passerbys and occupants of nearby buildings, and reduces the nuisance potential of lights, exhaust fumes and noise. Proper landscaping can help control circulation of cars and pedestrians, identify entrances and exits, provide reference points for locating cars in large lots, and give shade to people and cars.

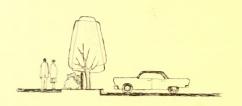
The planting of trees is one of the basic requirements in the landscaping of parking lots. Trees screen, shade and add value and beauty to the property. They require little maintenance and take little ground space. Trees which have low branches are to be avoided, as well as trees that drop excessive amounts of sap, seeds, seed pods, fruits, or blossoms.



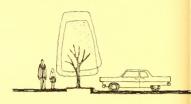
Trees selected should be those not easily subject to disease. They should be able to get along with normal rainfall and not be particularly attractive to insects. They should grow at a reasonable rate, have a long lifespan, and bare foliage of a pleasant shape and color. Other considerations in the selection of the proper tree would include the shape of tree required, its ultimate height, the foliage characteristics, texture and color, the shape of the branches when they are leafless, the texture and color of the bark. The addition of aesthetic amenities could possibly affect another aspect of parking in Monroe, and that is who parks in the lots. At present most of the off-street lots are used by employees partly because they are so far away from the stores as to be inconvenient to shoppers but also because most of the off-street lots are so unattractive and inaccessible that the shoppers would not be able to park their cars in the lots with ease or leave them there with any ease of mind. However, if the lots were made so attractive by the addition of landscaped walkways, benches, fountains, trees, shrubs, and flowers, the short term shopper might be a little more willing to park there and walk the longer distance.

Another major factor in the appearance of parking lots is the need to conceal the parked automobiles. This may be accomplished by a number of means some of which are shown in the accompanying illustrations.

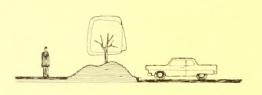




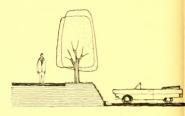
TREE AND HEDGE BARRIER



TREE BARRIER



MOUND BARRIER

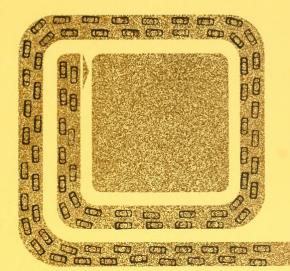


DEPRESSED LOT

Some of the main considerations in the choice of a visual barrier are zoning ordinance restrictions, initial cost, upkeep, character of nearby buildings, drainage and the particular visual appearance desired.

To arrive at the basic design which would include the proper amenities, a Landscape Architect should be retained to prepare plans for the lot. Besides just selecting the proper trees and shrubs the Landscape Architect should be able to determine the best layout and circulation system, as well as the location of fences, barriers, walls, benches, trees, shrubs so as to present an attractive appearance for the parkers and passerbys.

ANALYSIS











IV. ANALYSIS

A. Circulation System Inadequacies

Traffic congestion due to non-CBD oriented traffic is one of the most serious problems in all central central business districts, but in Monroe it was particularly acute prior to the construction of the U. S. 74 bypass. That bypass now serves from 9,000 to 12,000 vehicles daily. However, the relief provided by the bypass has been offset by the increase in internal movements. Arteries such as Franklin and Charlotte street have experienced increases in traffic volumes from 5,000 to 9,000 vehicles per day between 1953 and 1964.

The North Carolina State Highway Commission feels that a total of 5,000 vehicles per day is a capacity load for a street carrying two moving lanes of traffic. In the downtown area this capacity is greatly reduced by parking lanes and turning movements. According to this standard, three of Monroe's most important streets in the central business district are carrying traffic over their capacity. Franklin Street carries up to 9,000 vehicles per day through the heart of the central business district. Charlotte Street which is at the western edge of the central business district carries between 5,000 and 8,000 vehicles daily.

The major thoroughfare plan calls for Charlotte, Franklin and Hayne' streets to be part of the inter-loop system and they will have to be widened to four lanes to carry future loads.

The very narrow streets such as Morgan, Church, and Beasley are not carrying very heavy traffic loads at the present. The figures on these streets, which vary in width from twenty to thirty feet, run between 300 to 2,000 cars daily. However, Windsor Street which is also a very narrow street has been averaging between 3,000 and 4,000 vehicles per day. This figure is much too high for a street so narrow.

The principal streets in the central business district such as Main, Hayne, Franklin and Jefferson average about sixty feet in width, which is fairly wide for streets having only two moving lanes. In order to meet the standards for a street with four moving lanes, the street would only have to be widened eight feet, and if parking were to be taken off of one side, the street would not have to be widened any in order to accommodate four lanes.

Of the streets in the downtown area considered as major thoroughfares by the Highway Commission, three are of insufficient width. Charlotte Avenue varies from thirty to forty feet in width and should be fifty-two feet face to face of curb. Windsor Street varies from twenty-eight to thirty-two feet in width and should be forty feet face to face of curb. Houston Street is twenty-four feet wide and should be fifty-two feet.

According to data obtained from studies underway by the North Carolina Highway Commission, there are three intersections in the downtown area operating above their calculated practical capacity: Franklin and Main, Franklin and Hayne, and Hayne and Jefferson.

At this time traffic congestion does not seem very bad in Downtown Monroe. However, Monroe will continue to grow and traffic will increase so that the few streets which are presently being used to capacity will no longer be adequate. Two major problems in downtown are the short blocks which create a profuse number of intersections with traffic lights, pedestrian movements and turning movements, and the street pattern which does not provide any particular systematic pattern of traffic circulation in all directions.

B. Parking Deficiencies

As there are only two customer parking lots with spaces for only forty-nine cars in the principal core area of the central business district at present, the streets of Monroe now provide most of the usable customer parking spaces in the central business district area. There are 482 on-street parking spaces in the central business district and these spaces only make up 30 percent of the total number of spaces in which a customer can park in the central business district, yet in actuality the curb spaces really provide a much greater percentage of the spaces where customers actually do park. At 290 on-street two hour meters there was a total of 1454 vehicles parked during the day. At 343 off-street spaces surveyed (both public and customer use only), there was a total of 654 vehicles parked during the day, and the survey showed that the majority of the vehicles parked at the public off-street lots were parked there all day.

The off-street lots, however, were not the only places where motorists parked all day. There were a total of fifty meter feeder violators at the two hour meters, and there were thirty one violators at the twelve minute meters that the survey disclosed.

The overall parking situation in Monroe could be described as a set of plus and minuses. On the plus side are the favorable parking characteristics exhibited by motorists at the on-street meters in front of the major retail stores. Also on the plus side is the large number of off-street spaces in the central business district. On the minus side is the fact that there are so few of the off-street spaces really convenient to the major retail stores. It is also a minus situation that the on-street spaces have to provide such a great percentage of the actual spaces where the customer can park. Court House Square and the intersection of Main and Franklin streets are considered to be the heart of the central business district and everyone looks for a parking space in this area first. There are 219 metered spaces located within 300 feet walking distance of Court House Square.* These spaces make up 45.4 percent of the total on-street spaces in the central business district. This indicates that over half of the on-street spaces in the central business district do not effectively serve the major retail business in the central business district or they are too far away to be used except by shoppers parking in the immediate vicinity of these spaces. Before the end of the planning period or perhaps even sooner, the traffic volumes will be so heavy as to require the removal of many of the on-street spaces and because of this foreseeable event the City should make a strong effort to acquire convenient off-street spaces which will have to replace the on-street spaces. Another minus factor that could be corrected without too much difficulty is the large number of meter feeders, especially at the twelve minute meters. It is possible that the twelve minute meters themselves are a minus, and that the spaces could be more economically used by creating a longer time period, or at the most retaining the twelve minute meters only in front of businesses that are conducive to a short-term stay such as in front of banks or the post office. Since the average shoppers! stay is over forty-five minutes, it would not seem to be good usage to keep the twelve minute spaces just for the sake of a policy decision of having one at every corner.

^{*} The distance of 300 feet walking distance is a figure considered by some parking analysis as the maximum distance a shopper will walk in cities of Monroe's size. This distance was measured down the street from the intersections where the principal retail stores are located in order to determine the maximum number of on-street spaces within that walking distance.

Number of Spaces Needed

Primary Retail

In the foregoing chapters, we have discussed many facets of the existing parking in downtown Monroe. The remainder of this chapter is concerned with how much parking should be provided in downtown Monroe. In order to get an idea as to any possible deficiency, the parking has to be measured by some standard or comparable situation.

One method of determining needed parking facilities is to compare the area devoted to parking to the gross floor space in the buildings by a predetermined ratio. This method is used by many of the large shopping centers where developers provide as much as five times the area in parking as they do in floor space. The Community Builders Council recommends a ratio of three square feet of parking area to one square foot of gross floor area to be used for planning calculations in planning shopping centers. In determining parking needs by this method, they recommend allowing 400 square feet of area for each car. (This allowance includes access drives, storage spaces and incidental areas such as landscape plots and unusable corners.)

If, in the case of downtown Monroe, we apply a ratio of two square feet of parking to one square foot of building to all the primary retail type uses (primary retail, convenience retail, and consumer services) and a one square foot of parking to one square foot of building space to all other uses, we come up with the following:

oonvenience ketali	01,013		
Consumer Services	71,575		
	238,725	sq.ft.	at 2
		to 1 =	1,192
		spaces	
Secondary Retail	116,100		
Adm., Financial & Advisory	,		
Services	90,750		
Social and Cultural	92,550		
Wholesale	43,050		
Repair	12,200		
*	354,650	sa.ft.	at l
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		to 1 =	886
		spaces	

106,075

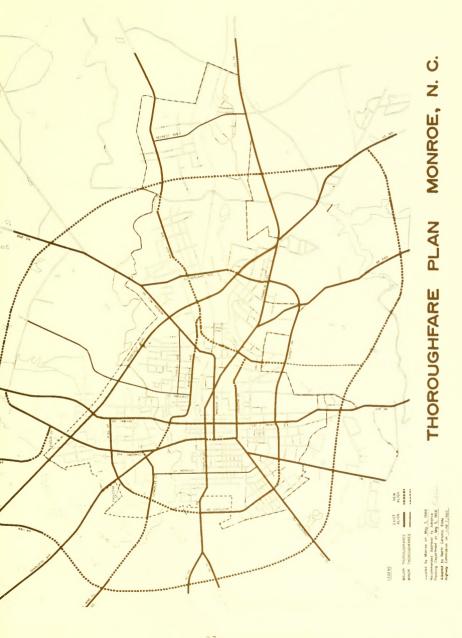
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Total public parking need - 2,078 parking spaces

Public parking provided at present -- 482 on street

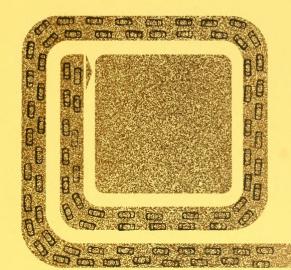
1103 off street 1585 total

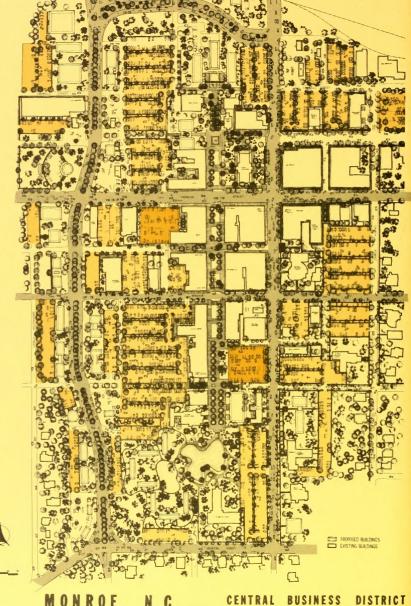
Present deficiency - 493 parking spaces





FUTURE PLANS





MONROE DISTRICT A. Traffic

A major thoroughfare plan has been jointly adopted by the City of Monroe and the North Carolina Highway Commission. This plan, in addition to providing a system of thoroughfares for the entire City, takes into account the detailed needs of the central business district. Traffic coming into the downtown area is routed along a proposed central business district loop consisting of Charlotte, Houston, and Hayne streets, Major eastwest cross town circulation is handled by a pair of one way streets - Windsor and Franklin. This system provides good continuous circulation completely through and around the central business district. An additional proposal of the central business district study is for a parkway type facility planned from the Hayne Street Bridge west to intersect with Charlotte Avenue. This parkway would be extended to the north (Charlotte Street extension) to tie in with Houston Street and become the western part of the downtown loop. The parkway would be landscaped with trees and provide an attractive feature for the downtown area. The accompanying illustration indicates the proposed downtown traffic circulation system.

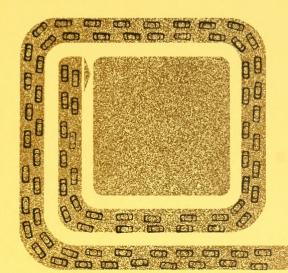
B. Parking

Finding a parking space in downtown Monroe will become more and more difficult as the population and the number of auto trips both increase. At some point in the future, it is anticipated that most of the existing on-street parking will have to be removed from the major streets to facilitate the increased traffic loads. At such time the majority of all parking in the downtown area will have to be provided by off-street facilities - either lots or decks.

The Preliminary Design Plan for 1985 indicates many off-street parking facilities located in a ring around the main shopping core. It is imperative that future parking lots are located close to the areas they are designed to serve. Two locations shown on the long-range plan are indicated as decks. These are the (1) entire block bounded by Main Street, Hayne Street, Tallyrand Street and Correll Street, and (2) the area to the rear of Belks between Franklin and Morgan streets. One other ideal site has been discussed - the Methodist Church property on Hayne Street. Any of these three locations would be ideal for a deck as they are all conveniently located in regard to the main shopping area of Monroe. As an interim measure, until such time as a deck should be proven economically feasible, on-grade parking could be provided on these sites. A program should be undertaken immediately to obtain off-street parking in the locations shown on the plan.



SUMMARY AND RECOMMENDATIONS









The greatest problem in Monroe at the present time is not the number of parking spaces, but the fact that there is not a sufficient number of public and customer parking spaces within a convenient walking distance of the major retail stores. Except for the Belks and Farmers Hardware customer lots, the only spaces within a convenient walking distance of the major core of retail spaces are the on-street spaces, and there is not a sufficient number of them to adequately serve the shopping public at the present - much less in the future.

The present deficiency figure of 493 spaces although not a colossal one, is relatively large. Still it does not seem unreasonable to expect that the City and merchants could provide these deficient spaces in the next two - five years. More important than the number of new spaces provided is the location of any new spaces. A hundred spaces near the retail core of stores would be much more valuable than five hundred new spaces constructed as far away as the Bowie-Stevens lot. The construction of lots far out on the fringe of the central business district is not to be discouraged, but it must be noted that such lots would only serve employees, which will be important as the central business district grows and more employees work there.

It cannot be stressed too much that the main problem lies in serving the shoppers, and the greatest efforts should be in trying to obtain land for parking lots near the core stores and with good access to the proposed interloop.

At the present time, the on-street parking spaces of Monroe which serve the retail core stores are on the whole serving their purpose fairly well. The turnover and duration data which are the principal indicators of how well the spaces are serving their purpose compare favorably with other cities of similar size, and in some aspects is even better. The principal failing of the on-street spaces is the large number of people abusing the time limits of the meters, and in so doing cheating other customers out of a convenient place to park and the merchants out of profits. Greater enforcement than is now the case is definitely a prerequisite to a better parking program.

The recent study by the Highway Commission on the traffic movements in Monroe indicate that the volumes are very heavy in the downtown area, and that the congestion will increase until the North Carolina highways presently going through the central business district are diverted, and the new interloop system is constructed.

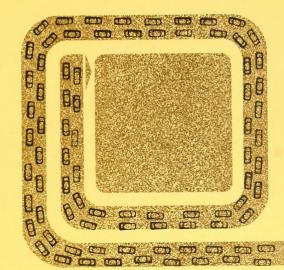
It is unfortunate that the interloop system as proposed will carry one of the main streets (Hayne Street) right through the heart of the central business district as it now exists, as this will bring a large number of non-CBD oriented motorists into the same area where shopping motorists will be trying to locate a parking space or circulate to another part of the central business district and the congestion from these movements alone will be great enough to tax the capacity of the street.

A. Recommendations

 $\overline{1}$. That the $\overline{49}3$ deficient parking spaces be constructed in the next five years within a convenient walking distance of the major retail stores, and that at least 50 to 100 spaces be constructed within two years.

- 2. That a specific parking body such as a Parking Authority be created to help the City maintain a parking program that will lead to the construction of the deficient parking spaces in the most effective places.
- 3. That the City try to effect a decrease in the number of "meter feeders" by better enforcement of the parking meters.
- 4. That the City remove the twelve-minute meters except where they serve a business or service such as a bank, post office or other business requiring short term parking facilities.
- 5. That a belt system or interloop be constructed around the central business district, and that the parking lots be constructed with good access to this interloop.
- 6. That the standards contained in this report be maintained whenever a new street is constructed or an old one is improved.
- 7. That the standards contained in this report be maintained in the provision of new parking spaces both on and off street.
- 8. That any new off-street facilities conveniently provided set up fees that tend to attract short term shoppers and discourage long term parkers.
- 9. That all revenue collected from parking meters be reserved and devoted to the provision of better parking facilities.
- 10. That all the two-hour parking meters be changed to one-hour meters. (The average stay recorded at these meters was fifty-seven minutes.)

IMPLEMENTATION













VII. IMPLEMENTATION

Before the parking program for Monroe can be implemented, the question of "Who should be responsible for providing parking facilities in a community?" should be considered. Before this question is answered, it is helpful to divide a parking program into four component parts to further understand the complicated problem.

- 1. Planning
- 2. Financing
- 3. Site Acquisition
- 4. Construction and Operation
- l. Planning -- This involves the survey work, analysis and preparation of a recommended specific plan and program. There is little doubt that this phase of the total program should be placed under the responsibility of the municipality either through existing agencies such as the planning board, or through a parking authority. In either case the planning should be done with close and active participation of specially interested business, professional and civic groups.
- Financing -- In many of the smaller cities such as Monroe, even though there is a tremendous need for additional parking facilities, the turnover rates and usages are not high enough to make the provision of parking a very lucrative business. For this reason, it is usually necessary that the financing of such facilities stem, if not from the local municipal government entirely, with some help or stimulus from the government. It should be noted that, irrespective of whether a public or private agency sponsors the financing of off-street parking projects, the funds will in most cases be derived from private enterprise (through bonds) even in a municipally sponsored project. An alternative to municipal financed projects is the situation where a particular project is financed by the municipality and the cost assessed directly to the benefited merchants.
- 3. Land Acquisition -- In the establishment of a parking program there are a few basic requirements which should be met. One of the main requirements is that the parking facilities should be established on a permanent basis (not sold out when an attractive bid for the property comes along). Another requirement is that the design of the facility be suited to surrounding street and traffic conditions. Also fee schedules should be required to be such as will attract the intended type of parkers and discourage others (for example, by offering low rates for the first two hours followed by substantial hourly rates, encourage the short-term parker or shopper and discourage the long-time or all-day employee parker.

If sites are acquired by the municipality the above requirements can be met with much more assurance than if the parking facilities are provided by private enterprise.

Another point in favor of municipal acquisition is that to acquire adequate parking facilities numerous properties under differing ownership must be assembled and purchased. This must be done keeping the total property cost down to a reasonable minimum. Sometimes to accomplish this, municipal powers of eminent domain and condemnation procedures must be used.

Even if the municipality assumes responsibility for site acquisition, there is nothing to prevent local property owners from sharing in the financing as through a benefit assessment plan.

4. Construction and Operation -- Generally, the responsibility for construction and operation of parking facilities usually involves the same group.

As the forementioned facts of the parking program (planning, financing and land acquisition) tend to be public in character, it may be desirable for the construction, maintenance, and operation of the facilities to be left to private enterprise, if it is willing and able to undertake the entrepreneurial responsibilities involved. In such a case the municipality would plan and purchase the facility and then lease the land to an operating company or small group of businessmen for construction and operation. Financing could be either municipal or could be handled by contributions from members directly affected in proportion to the benefits derived and their ability to pay.

There is no better example of imaginative private enterprise coupled with municipal participation where the municipality acquires and plans the facility and the merchants contribute to the construction and operation of the facility under a park and shop or validation plan. Under this plan merchants and parking operators unite to sponsor a program to make inexpensive or free parking available to shoppers. When a shopper makes a purchase, the merchant puts a stamp on the parking claim check. This stamp or validation is good for an hours free parking.

Setting Up the Machinery for Implementation

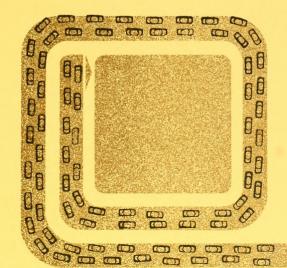
Once it has become evident that there is a parking problem sufficiently serious to require action, it becomes extremely important to place the responsibility for guiding the program into a centralized authority. This may be the mayor, the city manager, the chamber of commerce, a merchants committee, the planning board or a special parking authority. All efforts should be consolidated, since no satisfactory solution can be expected from piecemeal and uncoordinated private and public action with no one having authority to integrate the program.

Cities in North Carolina under State Statutes (G. S. 160-475-496) have the authority to establish a parking authority. This "parking authority" shall be constituted as a public and a body corporate and politic and shall be able to exercise public powers as an agent of the City. The purpose of the authority as set up by law is to relieve traffic congestion of the streets and public places in the City by means of off-street parking facilities, and to that end to acquire, construct, improve, operate and maintain one or more parking projects in the City. It is recommended that the City of Monroe establish a parking authority according to the procedures set up under G. S. 160-475-496. This group should be given the responsibility of carrying out the recommendations relating to parking in this study.





MONROE MERCHANTS SURVEY



APPENDIX

MONROE MERCHANTS SURVEY

QUESTION NO. 1 - Do you own or lease your present business area?

	Number of Replies
Own their building	20
Lease their building	7.4

QUESTION NO. 2 - Estimate the approximate percentage of your total dollar receipts or gross income in 1964 received from customers living:

	Percent of Dollar Sales
Within the Monroe City Limits Outside Monroe but within	45
Union County	44
Outside of Union County	11

QUESTION NO. 3 - Number of employees working in store or office (including owner, clerks, salesmen, etc.)

The merchants answering the survey indicated a total employment of 630.

QUESTION NO. 4 - How many of these employees drive a car to work?

Of the total employment it was reported that 404 or 64.1% drove cars to work regularly.

QUESTION NO. 5 - How many off-street parking spaces do you provide for:

Owner and	Employees	215
Customers		556

QUESTION NO. 6 - Do you feel that the present supply of parking spaces in the downtown area is adequate for present needs:

Yes 18 No 70 N.A. 10

QUESTION NO. 7 - Do you receive shipments of merchandise from street or from rear or side alley?

Street 66 Alley 29

A. What size truck delivers?

Tractor trailer 39
Truck 24
Small van 39

B. What time of day or night do you receive the majority of your shipments?

Night 2
Day 70
(some gave no answer)

QUESTION NO. 8 - Estimate how much gross floor space you presently occupy.

 Sales Space
 120,419 sq.ft.

 Office Space
 15,957 sq.ft.

 Storage Space
 103,687 sq.ft.

QUESTION NO. 9 - Does your business have any plans for expansion within the next two years to five years?

Yes 23 No 62

QUESTION NO. 10 - Would you be willing to contribute financially (in proportion to your direct benefit) to physical improvements (including off-street parking) for customers in downtown Monroe?

Yes 29 No 43 Maybe 3

QUESTION NO. 11 - Who do you feel should provide offstreet parking facilities?

The City $\underline{58}$ Private enterprise, i.e., industrial business establishments $\underline{10}$ Merchant cooperative corporation $\underline{12}$ Organization of a downtown assessment district 5

QUESTION NO. 12 - Would the development of a shopping center in the suburbs of Monroe have an adverse effect on your business?

	Number	of	Replies
Yes		29	
No		49	

QUESTION NO. 13 - If you were establishing a business for the first time, would you locate where you are presently located?

	Number of Replies
Yes	62
No	2 2
No Answer	13

QUESTION NO. 14 - If you should expand, would you do so:

	Number	of	Replies
On the present site Community shopping center	er	40	
in Monroe		18	
Other		18	
No Answer		20	

QUESTION No. 15 - Major problems that confront Monroe's central business district now.

	Number	οf	Replies
Lack of a full variety and selection of goods Inadequate customer facilities such as restrooms, lounges,		28	
lunch counters, etc. Store appearance and facilities generally out of date and un-		50	
appealing Inconvenient opening and closing		23	
hours		11	
Lack of effective leadership Absentee ownership		6	
Uncooperative city government Inadequate street lighting		2 4	

QUESTION NO. 16 - Indicate what actions should be taken in downtown Monroe to best meet the needs of present and potential customers:

Parking - 29 replies

- take meters out
- make effort in every possible way to meet competition of Charlotte and Mecklenburg County
- flush streets after sweeping (our dirty streets and sidewalks are enough to drive away potential customers).
- better restroom facilities for public
- improvement in physical appearance of some business firms
- regulate traffic lights to assure a smoother flow of traffic
- clean up (side streets are dirty)
- make Main Street one way
- prevent employees from taking parking space on streets
- merchandising sales promotion, better selling, higher trained employees, better customer relation and service, competitive merchandising and prices - all quality, more aggressive and better business attitudes.
- some of the older buildings should be torn down and replaced
- take down parking meters and limit parking to one hour - not let merchants park on streets at all
- better attitudes of employees better and more modern facilities
- give courtesy card instead of parking ticket to out of town people
- install walk lights at intersections
- keep loading zones for loading not for parking
- restoration and beautification of court house
- more eating places
- trash cans on every block downtown are badly needed
- city needs good cafeteria and/or restaurant in town
- form merchants parking co-op.
- eliminate traffic in Main Street and convert to a mall or close certain portions of Main Street

Question No. 16 (Con't)

- purchase area in front of telephone company (10-12 acres) and use for parking
- plant trees and shrubs downtown

QUESTION NO. 17 - Please indicate below your judgement or the major problems that confront Monroe's downtown shopping area. Check those factors you consider a major consideration.

	Number of Replies
Physical deterioration of downtown	
buildings	3 5
Inadequate number of off-street	
parking spaces	63
Congested downtown streets	43
Congested streets leading to downtown	9
Poor appearance of downtown buildings	
and streets	28

QUESTION NO. 18 - Of the improvements listed below, which do you think should be incorporated in downtown?

	Number of Replies
More parking	62
Improve store fronts	3 2
Provide public restrooms	40
Stores open more at night	11
Pedestrian mall	13
Canopies over sidewalks	13
Shrubs planted	1 6
Trees planted	10
Improve sidewalks	3 4

(Not answering 18)

QUESTION NO. 19 - Are there any city, county, state, or federal government offices which you and/or your employees visit daily, weekly, or occasionally?

Yes <u>67</u> No <u>19</u>

	Number	of Repl	ies
	Occasionally	Daily	Weekly
Post Office		19	1
City Hall	2 1	1	2
Clerk of Court	19	1	3

QUESTION NO. 19 (Con't)

	Number of Replies		
	Occasionally	Daily	Weekly
Tax Department	17		2
Register of Deeds	7	3	
Police	3		
Health Department	3	1	1
Sheriff's Department	2		
Library	2		
Revenue Department	1		
Board of Education	1		
County Manager	1		
Chamber of Commerce		1	
E. S. C.		1	
Bank		1	
Agriculture Office		1	
Welfare Department		2	1







